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VALLEY TOWNS OF CONNECTICUT.

BY

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The surface of Connecticut may be said to repeat, to a certain degree, the surface features of the country at large on a smaller scale: a wide valley with the main river in the centre, and mountain ranges in the east and west. But unlike its larger counterpart, the Constitution State offers the strange case of a river and valley not continuing partnership to the end; below Middletown, the Connecticut *Valley* continues southwest towards New Haven, while the Connecticut *River* intersects the crystalline upland, forming a narrow gorge, through which it winds its solitary way southeast toward Old Saybrook. Thus it happens that the largest river of New England has been of almost no importance for the development of the country in that part of its course in which other rivers have been most important for the same—namely, in its lower course. It is, perhaps, the only river of its size which has not at its mouth a seaport proportionate in commercial importance to that of the country which it drains. If Hartford may be called the St. Louis of the Connecticut River, it is in vain that we look for its New Orleans. The functions of that port are divided between New Haven, which controls the entrance to the Valley but has no river, and Saybrook, which controls the mouth of the River but has no valley. This anomaly is one of the principal causes why, in Connecticut, the settlement of the country never proceeded to any extent upstream from the mouth of the river. The Saybrook Plantations never made any acquisition of territory upstream, but remained a pure trading colony under a royal patent similar to the Dutch colonies, until the Valley towns, realizing the importance of a complete control of their waterway, acquired that

territory by purchase; and for the same reason the commercial aspirations of New Haven suffered cruel disappointments until the means of modern traffic opened up for it a direct communication with the hinterland.

The term Connecticut Valley, as used in this paper, is, then, understood to be distinctly different from the valley of the Connecticut River proper. It applies to the topographical and geological unit represented by the area of Triassic sandstones and traps which extends from the Massachusetts-Vermont line to the Sound as a lowland of varying width, but coincides with the valley of the present river only as far as Middletown. This configuration of the country explains the distribution of the people. The founders of the "Towns upon the River" (Windsor, Hartford, and Wethersfield) and of Springfield, Mass., came from Massachusetts Bay. The voyage thence round storm-beaten Cape Cod was so perilous, and the season for navigating up the river on which ships might freeze in during five months out of twelve was so short, that, in spite of the dangers of the wilderness, almost all travel and traffic between the mother and daughter colonies was by land. As a highway to the ocean, on the other hand, the river was of little value to those early settlers who had come, not for commercial purposes, but in search of homes. Consequently these towns, in spite of their location on a splendid waterway, grew up as a distinct *inland* colony whose area was co-extensive with the cultivable land in the Connecticut Valley, and the connection of this outpost of civilization with the world outside was, not by what would appear the natural way, the river, but eastward overland. Neither the country nor the settlements on the Sound were as yet of any practical interest to them.

New Haven, in her turn, had just as little desire or need to establish a connection with the River Colony. The two had nothing in common but their strong love of independence, which only intensified the effects of the existing geographical barriers. The founders of New Haven had strong commercial interests. Coming directly from England, the shore was the natural location for a first settlement, because it offered them the best facilities for trade with, and eventual return to, the mother country. They looked and travelled eastward across the ocean, not northward toward their sister colony. Moreover, between them and the latter there extended many miles of low, swampy country which did not invite settlement or traffic, and not until the growth of New York and Boston required a regular connection between the two great ports was there any need of establishing roads through this region. Thus the two colonies grew farther

and farther apart during the first decades of their existence, and New Haven might form another Rhode Island by itself to this day had not the necessity of seeking allies against a common foe brought them together at a comparatively early date.

In studying, first, the colony on the River, we must not limit ourselves to the towns south of the present State line. This line cuts through both a geographical unit and a unit of settlement. Springfield, Windsor, Hartford, and Wethersfield were settled under the same conditions, by the same set of pioneers from the same mother colonies, before any political boundaries had been drawn in this vicinity. All four of them were founded, as the settlers believed, under Massachusetts jurisdiction; all four extended over, and adapted their configuration to, the Valley lowland; all four of them convened at Hartford, until an arbitrary line drawn by one who had never set his foot on Connecticut soil separated what belonged together by law of nature. The course of the State line was therefore an object of controversy for many years, and the present line still shows visible traces of it. Connecticut ultimately regained at least part of the Springfield territory—viz., the present towns of Enfield (End-field) and Suffield (South-field). But the consequences of the unnatural separation are still felt, especially in regard to the important problems of river navigation, where State jealousies have always been the greatest obstacles to radical improvements required by the best interests of both Commonwealths: an instructive example of how far man is from being helplessly dependent on his geographical environment; the most favourable conditions will be of no use to him unless he knows how to avail himself of them, just as well as it is possible for him to assert himself in spite of unfavourable ones.

This divergence of the actually existing conditions from the geographic postulates, which always forms one of the greatest charms of anthropogeographic investigation, gives a special flavour to the political geography of America, for it is more pronounced here than in any country of the Old World. While in the latter we observe man emerging slowly and gradually from the state of slave to that of master of geographic conditions, America offers the unique spectacle of a race of masters who, suddenly and without any transition, supplant a primitive race of slaves of nature, a top layer, so to speak, being superimposed upon a bottom layer, with a wide gap between. This master race, this top layer, brings to the new soil the results of the training of centuries on the old; it applies and tests them on conditions under which they never worked before. We must, therefore,

expect to obtain results often quite different from what we would conjecture in Old-World anthropogeography, and, where the results are alike, it will be a strong argument in favour of the postulates.

The Connecticut Valley is a very thankful object for such studies. It is really a double valley, being divided into two unequal parts by the chain of trap ridges which extends from New Haven to Holyoke and beyond. The valley east of the ridges has the present river; it will therefore be designated by the name of River Valley. The valley west of the ridges has at present no connected watercourse; its line of lowest depression is divided up among several smaller watercourses running in different directions but leading practically nowhere. According to its drainage it may be divided into two parts in its turn: the northern part, generally speaking, drains into the Connecticut by way of the Farmington River, and its southern limit is, approximately, the town of Cheshire; we shall designate it as the Farmington Valley. The southern part drains into the Sound by various small rivers converging more or less toward New Haven, and it will be called the New Haven Valley (Fig. I).

This natural division into an eastern, or River Valley, western, or Farmington Valley, and southern, or New Haven Valley, we shall find repeated in the political history of the Valley settlements.

The first colony took its origin in the River Valley. The four towns which belonged to it—Springfield, Windsor, Hartford, and Wethersfield—grew up as products of the topography left by the work of the Springfield Lake and the rivers succeeding it. What opportunities did this region offer to the founders of the towns? There was a large river in the middle of it, bordered on either side by alluvial meadows; beyond them the country rose in echeloned terraces of clay or sand; beyond these, on either side, rose a more or less steep escarpment covered with forest, the "wilderness" in which unknown dangers were lurking. The river offered fish and a convenient way of travel between the settlements on its banks; the meadows, arable land for fields and pasture for the cattle; the terraces, desirable sites for houses in the vicinity of the former and yet out of immediate danger from the freshets; the wilderness was a region to be avoided. Consequently, the borders of the wilderness were selected for the east and west lines of the towns; at right angles to them, with the River in the centre, the north and south lines were drawn, so that each community might have an equal share of the respective advantages of the different parts of the Valley, and so the four original towns came into existence as four strips of land, of approximately equal shape, lying north and south of each other on

both sides of the River, like so many pearls on a string (Fig. II). It is very significant, and ought to be mentioned here with due

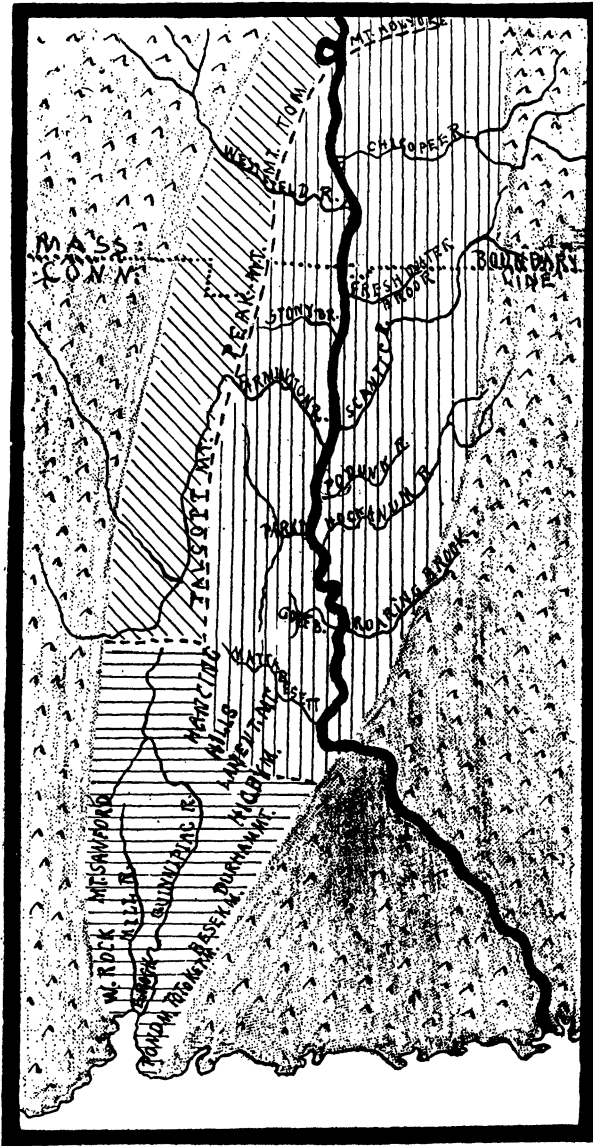


FIG. I.—PHYSIOGRAPHIC DIVISIONS, CONNECTICUT VALLEY.
 ||| RIVER VALLEY. ≡ NEW HAVEN VALLEY. \\\ FARMINGTON VALLEY.

emphasis in regard to general anthropogeographic discussion, that the thought of choosing the river for a boundary between the towns

does not seem to have ever entered the minds of the settlers. There is no trace of even a suggestion to that effect in the reports on the

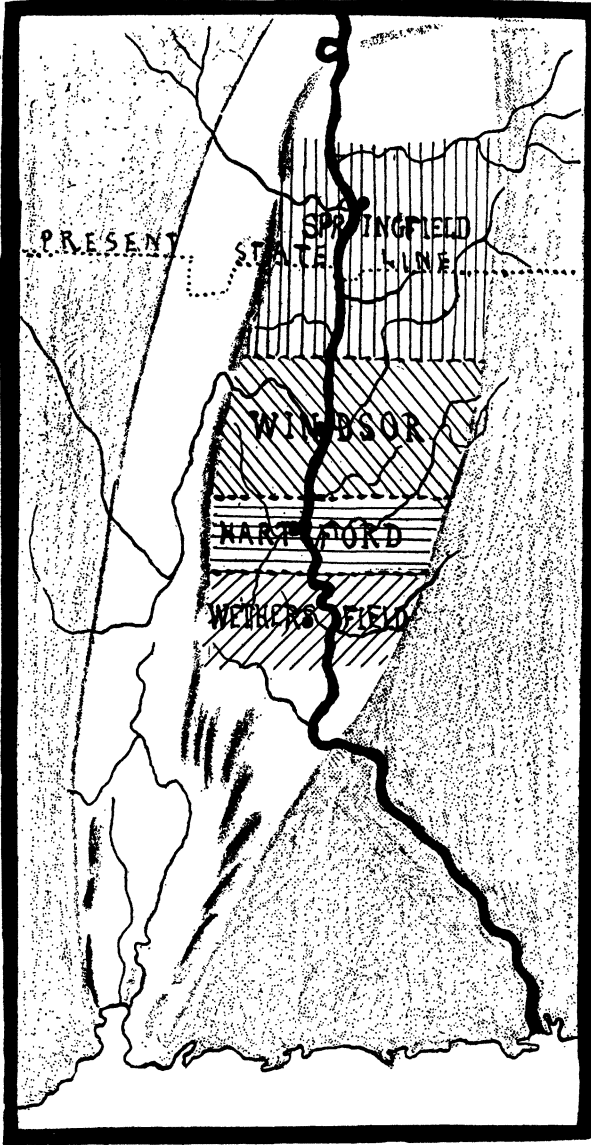


FIG. II.—ORIGINAL TERRITORIES OF THE FOUR VALLEY TOWNS.

work of the boundary commissioners. They seem to have instinctively acted in accordance with the law that mountains, not rivers,

especially not the large navigable rivers, are the natural boundaries of the expansion of man.* The large river is an artery of life for the country through which it flows; the similarity of the country on its banks creates a community rather than a diversity of interests between the occupants thereof, to say nothing of the interests represented in the river itself: navigation, fisheries, etc., which are common to the inhabitants of both shores. Moreover, a large river is a surface rather than a line, and for this reason alone would be ill fitted for the function of a boundary, since the layout of the line along the *talweg* is subject to constant change. The Franco-German boundary along the Rhine was an anomaly, due to ungeographic political influences, and so are other similar boundaries, unless the nature of the river itself makes it an obstruction to, instead of a means of, traffic. On the Connecticut River, where none of those unnatural conditions were encountered, the geographical law could assert itself to its fullest extent, and thus we find that every town on this river, not excepting those farther down in the gorge, originally included the land on both sides of the same.†

With small streams and brooks the case is different. They often are, in fact, nothing but a wet line in the country, and for this reason were, here as well as elsewhere, quite frequently chosen as convenient lines of demarcation between the settlements. Beaver Brook and Pewter Pott Brook are mentioned among the early boundaries of Wethersfield; the same is true of Roaring Brook in Glastonbury; of Kettle Brook in Windsor; of Podunck and Pewter Pott River in East Hartford; of Longmeadow Brook, Freshwater River, and Saltonstall Brook in Enfield; of Three Mile Brook in Suffield, etc.‡

Between the small brooks which separated, and the large River

* A striking example of the barrier effect of mountain ranges, of a more local character, is given by the town of Newington. Although this town was settled as a colony of Wethersfield, and all its leading families are descendants from the old aristocracy of Wethersfield, there is almost no connection, material or immaterial, between the two towns, on account of "the Mountain" (Newington or Cedar Mt.), which extends between them (Fig. III). Owing to the particular configuration of the Connecticut trap ranges (gentle slopes on the east, abrupt descents on the west side), it was easy enough for the colonists from Wethersfield to go beyond the range westward; but for the Newingtonians the way east up the steep ascent on their side of the range was too much hardship to be made more often than was absolutely necessary, and as soon, therefore, as the territory of New Britain and Berlin was developed, the life and business of the town followed the line of least resistance downhill, so that all its vital interests are now connected with those two towns which originally were quite alien to it.—(Private communication.)

† Cfr. likewise the grouping of the states above each other on both banks of the Nile, and, as an illustration of the penalties paid by man for the violation of geographical laws, the inconveniences arising from the fact that, at the mouth of the Hudson, the two banks belong politically to two different States.

‡ Cfr. Ratzel, *Anthropogeographie* I, 2d. edition, p. 350: "On the lower Zambesi, Livingstone found the territories of the smaller chiefs bounded by the small rivers, while the mighty Ma Kololo, and after their extermination, their language, spread on both sides of the main river."

which connected, the settlements, the medium-sized tributaries of the latter fulfilled a function of their own: they *determined the location of the centres of settlement*. The peninsula formed at the mouth of a side stream and the main river offers, if the former is of sufficient size, a strong position for defense, than which no better could be found in those days of constant danger from Indian attacks. In every case, therefore, with the only exception of Wethersfield, where the Indians at first were friendly to the settlers, the settlement of the territory between the two wildernesses started from such a peninsula. The classical example is the mouth of the Park River,

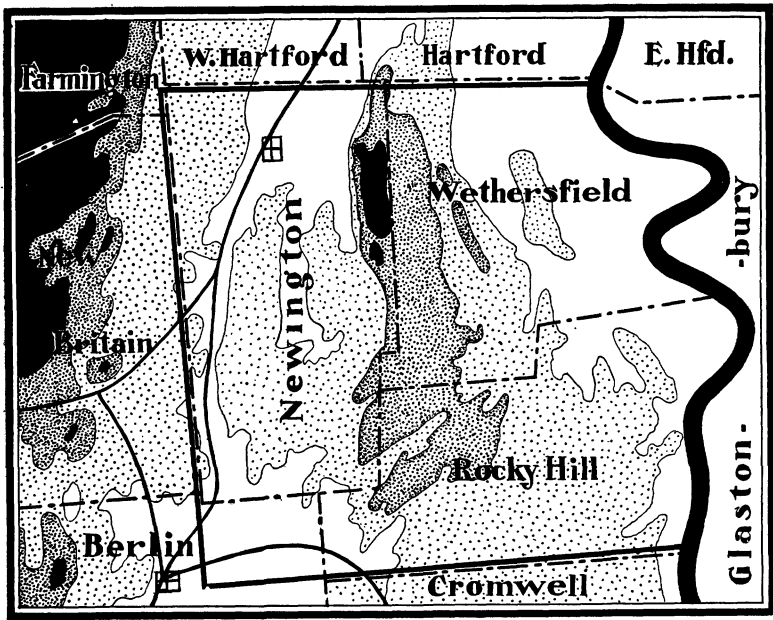


FIG. III.—THE TOPOGRAPHY OF NEWINGTON, CONN. THE HEAVY BLACK LINE INDICATES THE ORIGINAL TERRITORY OF WETHERSFIELD.

where the Dutch planted the first habitation of the white man that was ever built in this region, the Fort of Gode Hope; and the English founders of Hartford, finding the best location already taken, thought even the second best superior to all others, and began to build their houses a little farther upstream, but still on peninsular ground (Fig. IV). The Palisado of Windsor, the nucleus of the later town, likewise was erected at the junction of the Farmington and Connecticut Rivers (Fig. V), Springfield was founded at the mouth of the Agawam, from which site only the flooding of the very low delta caused the settlers to move to the higher bank opposite; in

East Windsor, the first houses stood near the mouth of the Scantic, and in East Hartford near that of the Hockanum River; the beginnings of Middletown, in later years, started from the mouth of the Mattabesett. The similarity of the geographic function of these



FIG. IV.—HARTFORD, CONN. THE BLACK LINE SHOWS THE RECTANGULAR BLOCKS IN THE OLD, AND THE DIVERGING AVENUES IN THE NEW, PARTS OF THE CITY.

ivers is strikingly expressed in the similarity of their names: in each town the tributary appears on the records as the "Little River," in opposition to "The" River, which means the Connecticut—a charac-

teristic illustration of the supreme importance of the latter, whose unique relation to the settlements needed no epithet to distinguish it from others.

In proportion as the need for immediate protection decreased, the Little Rivers assumed new functions. Being large enough to support a limited traffic, they became influential as secondary waterways in directing the progress of exploration and expansion of the settlements toward the wilderness* (Fig. V). Along their banks the later pioneers moved mountainward, and they were repaid by the discovery of beavers whose skins they could trade, and by the possibilities for industrial pursuits which the water-power of the Little Rivers afforded. Sawmills, gristmills, and similar industrial plants sprang now up along these banks, and what used to be the Little River of a town soon had this name changed to the now more appropriate one of Mill River. This name has survived in many instances to this day, even after steam and electricity have to a large extent replaced the original water-power plants. The objectionable features, however, of a location on a more or less shallow stream made serviceable to human interests have increased with the increase of the population and of the industries themselves, so that in most cases the Mill Rivers of the present are indicative of parts of the town whose aspects can be pardoned only by studying the present in the light of the past. The popular name of Hog River for Hartford's Little River is significant. Hartford, on the other hand, has been very successful in rescuing at least part of it from the curse of outliving a once glorious mission, and her Little River now well deserves the appellation of Park River, by which the youngest generation has come to know it.

The distribution of the town lands among the settlers which determined the characteristic features of the layout of the towns for ever after was similarly influenced by geographical facts. It was based on these two considerations: each proprietor must have access to the river, and each must also receive an equal share of the fertile but unhealthy meadow, and the less productive but safer and healthier "upland," as the terrace was then called. The land on the banks of the River was therefore divided up into narrow tiers, strips of land running east and west from the River, and the occupants built their houses on the bluff of the "meadow hill" (=first river terrace), where they were within easy access to their fields and yet out of danger from freshets. This arrangement of the houses in its turn determined that of the streets and highways. In the

* Cfr. Ratzel, *Anthropogeographie* I, No. 154: die Flüsse als Wege.

earliest days of the colony, when through-traffic could hardly be spoken of, the main function of roads was to connect houses. The

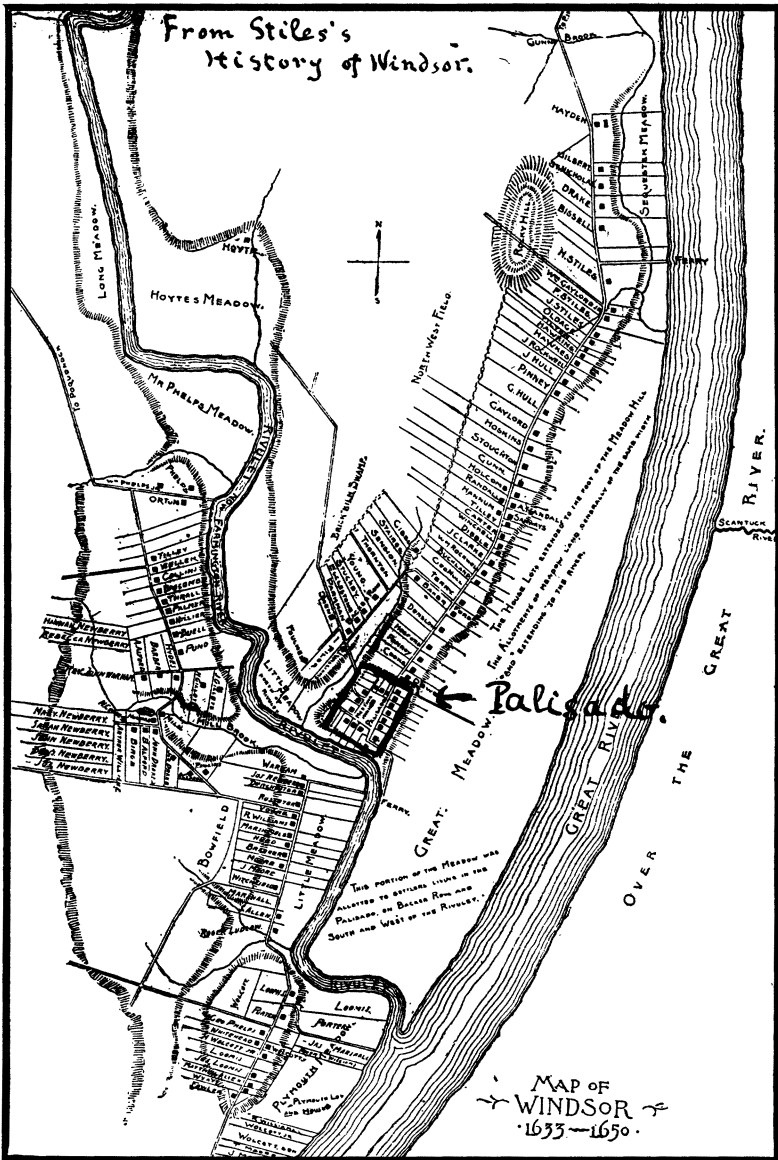


FIG. V.—WINDSOR, CONN. THE RELATION OF HOUSE LOTS TO MEADOW AND TERRACE.

latter being arranged as they were, a street connecting them could not but run more or less north-southward and generally parallel to

the River; and this is exactly what the main streets of the valley towns did and still do. Later, when the country farther inland was parcelled out, this mode of distribution had become an established custom: another tier of narrow strips of land succeeded the first on the second terrace, with another street parallel to the first and to the River, and so forth until the plateau back of the highest terrace was reached (Fig. V, VI). By this time the settlers seem to have had enough of this enforced submission to the whims of topography, for on the plateau we find the streets laid out in all possible ways and intersecting each other at any imaginable angle. The maps of the present River towns offer, therefore, an arrangement of their streets which is almost the direct reverse of that of other cities. Their old quarters have long parallel thoroughfares cut up

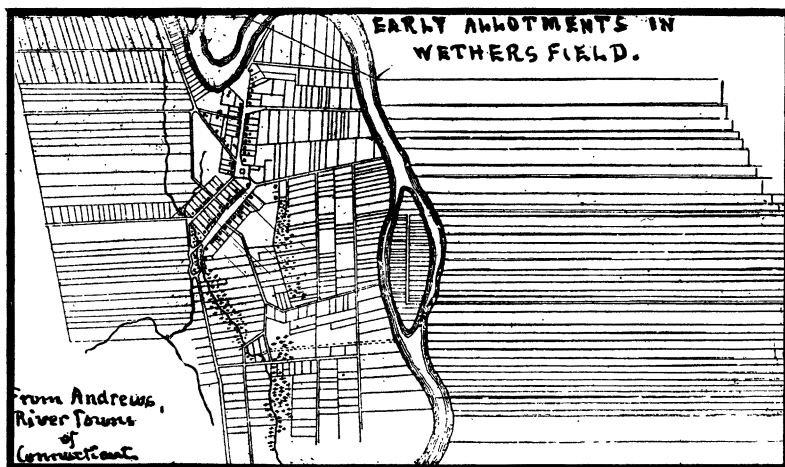


FIG. VI.—SERIES OF TIERS IN WETHERSFIELD, CONN.

into more or less rectangular blocks by short side streets, while the new residence districts are characterized by a striking irregularity in the arrangement of their thoroughfares—a circumstance which certainly has much to do with their picturesqueness (Fig. IV)

In the early days the progress of settlement was more rapid on the western than on the eastern bank, because the latter was mostly open meadow land and the former more wooded. The lands on the east bank were, therefore, at first utilized for pastures only, and are often distinguished as “Farms” from the town proper: Windsor Farms or East Windsor, Naubuck Farms or East Wethersfield, and the like. By and by, however, what people called over-population in those days obliged them to extend the settlement to these less attractive parts of their territory. The topography of both banks

being the same, the established method of land distribution was applied again; but in the meantime the colonists had learned in their old homes that the first terrace was, after all, somewhat too near the water to insure perfect safety from its dangers, and therefore, the pioneers on this bank started settlement from the *second* terrace. The first street, consequently, runs on the second instead of the first terrace on the east side. It also differs from the main street on the west side by its being very wide and straight; for at the time when it was laid out through traffic had already begun between Hartford and Springfield. Under these conditions the street was not laid out from house to house, but with a definite purpose independent of which future houses might be built on it.* Its unique role as compared with other streets is shown, as in the case of the Connecticut River, by the use of the definite article: it is "the" Street of the towns through which it runs, even now. In East Hartford alone another street accompanies it on the first terrace, and this is easily explained by the fact that there alone the east bank had been found originally free from wood or brush and that therefore this region had been settled at about the same time as the western bank, and on the same plan. East Hartford is, therefore, the only town on the east side whose oldest houses stand on the brow of the "meadow hill," and where the main street, following the gentle curves of the River, offers a variety of picturesque perspectives which all the imposing layout of "the" Street farther north is unable to give.

In the New Haven Valley conditions were entirely different. The whole country was very low, the meadows were mostly tidal marshes. No large river had remodelled the glacial deposits, which, so near the ocean, had probably never been undisturbed long enough to develop anything like terraces. The only location with a future was on the coast, and thus New Haven was from the start predestined to a much more dominating position among the neighbouring

* There is one instance on the west side, too, of a street existing prior to the settlement. This is Suffield, the original southwest corner of the town of Springfield. Of all towns bordering on the river Suffield is the only one which has no alluvial meadow land, owing to the fact that the underlying sandstones crop out directly on the bank of the river, whose bed is here cut into bed rock, forming the Enfield Rapids or "Falls" on the other side. Lacking that which the early settlers prized most, this district remained a wilderness until quite late into the eighteenth century, in the midst of a thriving commonwealth, and it was known generally as the "country on the road to Northampton." But when the traffic with that town became more lively the advantage of a location on a main highway offered compensations for the lack of alluvial soil, and along the street, the then straight street, the village and later town sprang up. Its inhabitants soon found out, too, that the rich glacial soil was no less desirable for agricultural purposes than the meadow land, and the town of commercial origin is indeed to-day one of the few which have preserved their rural character in spite of the industrial invasion of modern New England, thanks to its flourishing tobacco-fields. Fig. VII, whose outlines will also apply to any village on "the" Street on the east side, shows very clearly how far the configuration of a typical street settlement differs from that of one founded regardless of commercial considerations, such as the three original towns.

towns than Hartford ever held in the Connecticut Colony. New towns were founded, indeed, east, west, and north of the harbour town; but their relation to New Haven was submission to a powerful leader rather than a partnership of equals, as in the case of the "Towns upon the River." The founders of New Haven town found no meadow hill to build houses on; the only somewhat healthy locations for home-building were the little hills formed through the intersection of the lowland by the small streams. One of these hillocks, between two creeks filled up since, was selected for the New Haven town plot, which was scientifically laid out into nine squares with all the rigid economy that the scarcity of space required, meadow lots being allotted away from the houses outside of the settlement proper (Fig. VIII). From this centre the town and later city spread out in all directions, so that its map has now a distinct star-like aspect, quite unlike the rather fan-shaped outlines of cities like Hartford or Springfield (Fig. IX).

From these two nuclei of settlement a lively colonizing movement started about the middle of the seventeenth century—a movement which worked toward bringing the boundaries of the two nearer each other, without as yet establishing any direct contact. The River towns began to investigate what was back of the wilderness that enclosed them on the west; the shore town pushed farther north. The former crossed the trap ranges and discovered another valley with a river and terraces similar to their own, though not so wide; the latter discovered other habitable spots rising from out of the marshy lowland. Thus Windsor colonists crossed the mountains and founded Simsbury; Hartford people, Farmington; Wethersfield penetrated beyond the Rocky Hill into what is now Middletown, and beyond Cedar Mountain into Newington; in the north, Springfield, with the assistance of a considerable contingent of pioneers from her southern neighbours, laid the foundations of Westfield, Hadley, and Northampton. The geographic conditions of the daughter towns repeat those of their mothers: Middletown, Northampton, and Westfield are terrace towns, Simsbury and Farmington likewise nestle on a strip of high land "on the slope of the mountain between forest and meadow." The offspring of New Haven, on the other hand, Wallingford, is another example of a village laid out carefully on the limited space of a small elevation, in this case on one of the lower-sandstone ridges which crop out from under the marshes, along and across which the lines of the streets and house lots were drawn with the same mathematical accuracy with which the foundations of the mother town had been established.

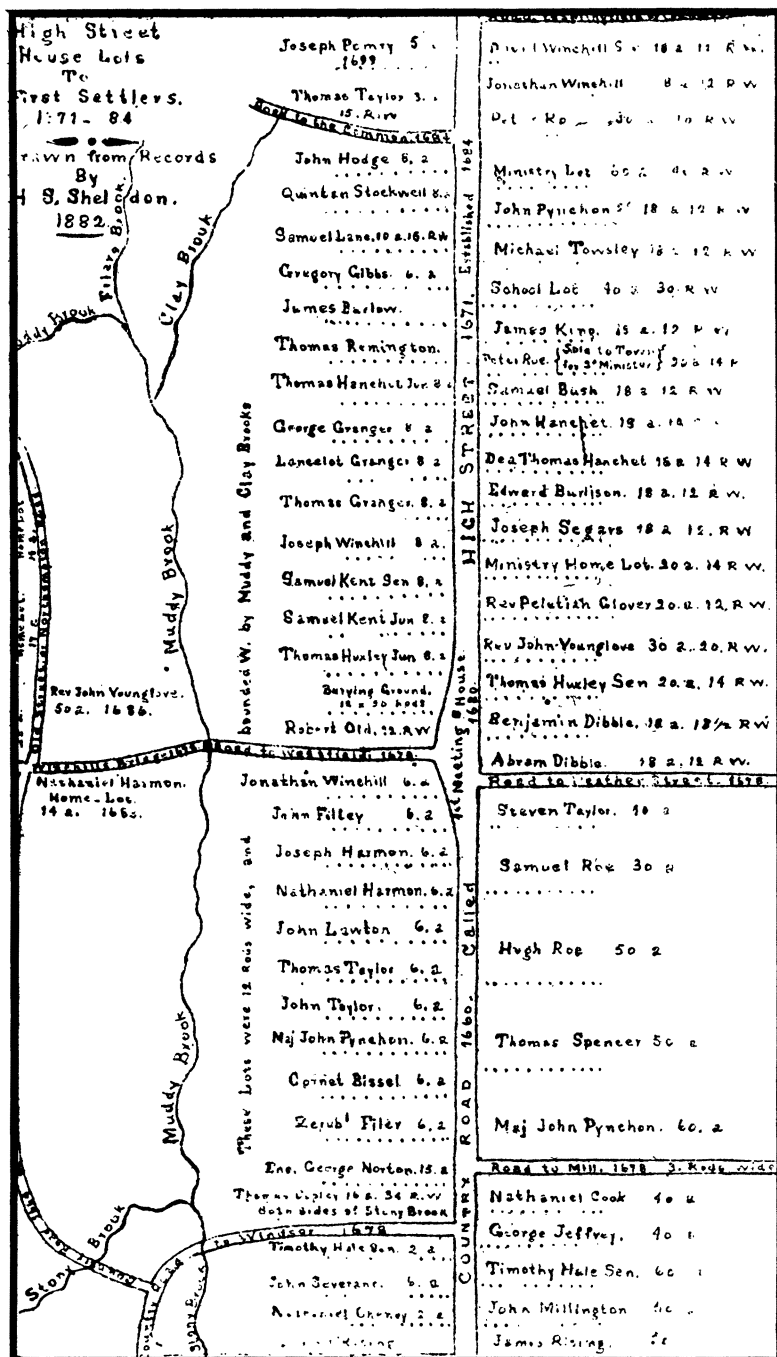


FIG. VII.—SUFFIELD, CONN. THE RELATION OF HOUSE LOTS TO THE PRE-EXISTING STREET.

A political map of the colonies at the close of this first period of expansion would then show the following aspect: Two individual colonies, one with its centre of gravitation on the Sound, the other in the meadow and terrace district of the Connecticut River and its tributaries. Both are enclosed between the uplands east and west, the former reaching north as far as Wallingford, the latter extending south as far as Southington and Middletown. Between them was a low and swampy territory, uninviting for settlement, which formed a natural barrier between the two colonies on the area now

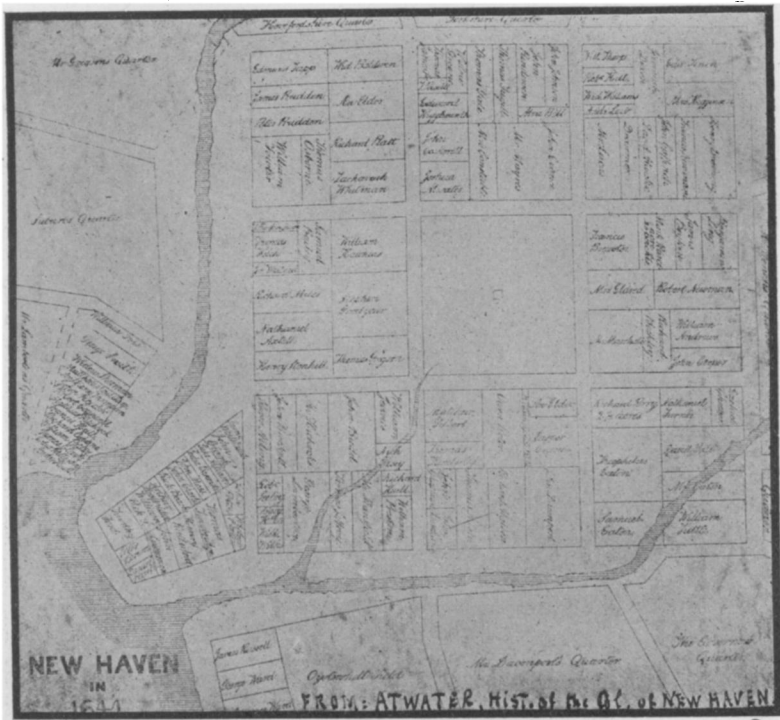


FIG. VIII.—THE ORIGINAL TOWN LOT OF NEW HAVEN, CONN.

covered by the towns of New Britain, Berlin, and Meriden (Fig. X).

An outside impetus finally closed the gap between the two spheres of interest. In 1686, when the appearance of Governor Andros threatened the independence of the colonies, the court of Connecticut made a hasty grant to the existing towns of the hitherto unoccupied lands both on the western hills and between the colonies, to avoid being compelled to surrender them to Andros. The actual occupa-

tion of these grants well illustrates the difference between central and peripheral locations. It took over thirty years before the present towns of Litchfield, Harwinton, and New Hartford grew up on the outskirts of the Connecticut colony; while the border country at the foot of the Hanging Hills, in spite of all its objectionable features, soon began to feel the quickening influence of a location half-way between two thriving commonwealths. In addition to that, the

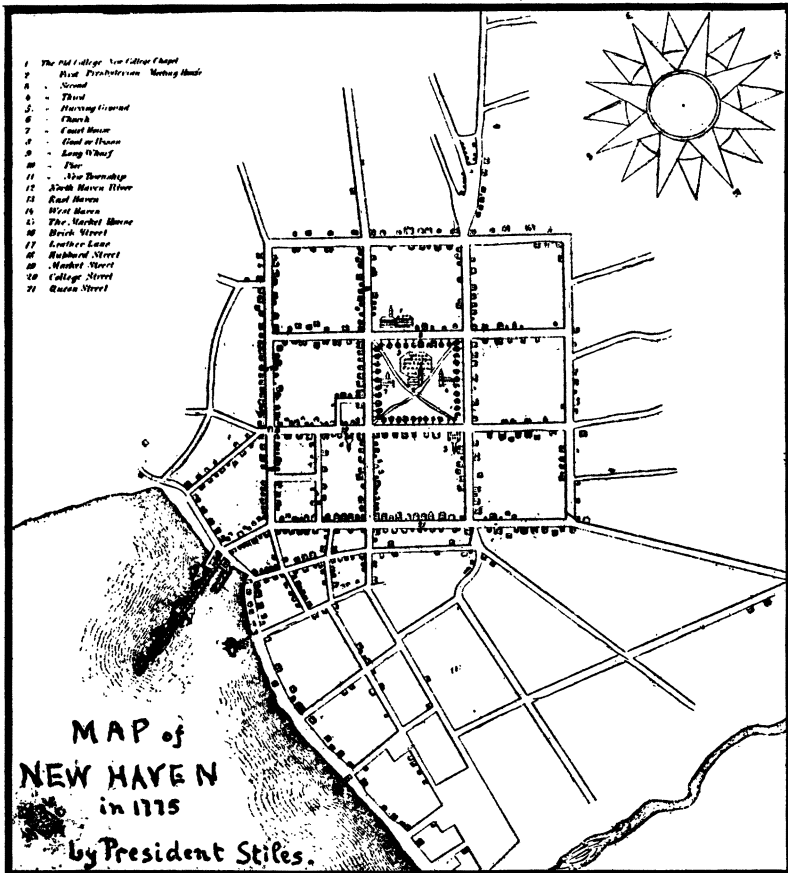


FIG. IX.—MAP OF NEW HAVEN, SHOWING THE AVENUES RADIATING FROM THE ORIGINAL CENTRE.

greater advantages of through traffic made themselves felt, since New Amsterdam had become New York, and the need of an over-land connection between it and the other great centre of English colonization on the Bay had led to the establishing of a stage route between Boston and New York. Under such conditions it did not take long before the first houses of the present town of Meriden

sprang up in the neighbourhood of a famous tavern which stood here for the accommodation of travellers between the two metropolises; and the development of this town is another instructive example of the influence of location. Both colonies took their share in it. It was founded under Connecticut jurisdiction and settled by Connecticut people from the adjacent towns. But it is the only instance of people from that State building, not a terrace town, but a hill town on the New Haven plan; for on this territory of New Haven-ish configuration their traditional method would not work. Old Meriden, like Old Wallingford, stands on a sandstone ledge rising from out of the lowland. Very soon even the political allegiance began to be felt as something incongruous with their environment. One after the other the freemen of Meriden began to petition to the court of Wallingford for admission as citizens of that town, so that before long the majority of the inhabitants of this Connecticut place were New Haveners politically. At last this discrepancy made the situation so untenable that the village as a whole went over to the other side as a New Haven town—one of the most striking instances of the attraction of geographical relationship working against arbitrary political conditions. The aspect of the present town line still reflects the uncertainty of conditions under which it was established (Fig. X).

In the border district on the east the controversies about the State line had similar results. Along the escarpment of the upland, settlers from the River towns had reclaimed the territory of the towns of Somers, Vernon, Bolton, Tolland, Coventry, from the wilderness, but those adjoining Windsor were in a state of almost perpetual change between Massachusetts and Connecticut jurisdiction. On the occasion of one of the many regulations of the State line, Windsor lost such a large part of its territory that it petitioned for a compensation. In compliance with this petition it was granted as an "equivalent" "all the vacant land between Windsor and Tolland, and the unoccupied territory north of Tolland." The former extended the boundary of the town considerably eastward; the latter was found, upon examination, to be just a small gore of land extending from the town across the upland to the Willimantic River. This gore, which was popularly called the equivalent, afterwards went with the eastern part of the town when this was set off as a separate town by itself, and so the new town received a shape not unlike the letter L, from which even its name of Ellington is said to be derived (Fig. X).

The land was now occupied all over. Its population increased

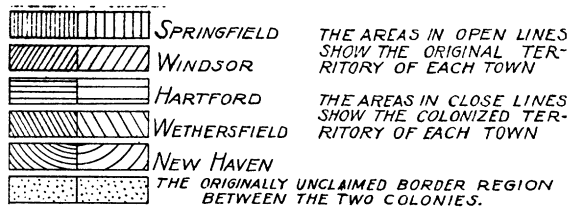
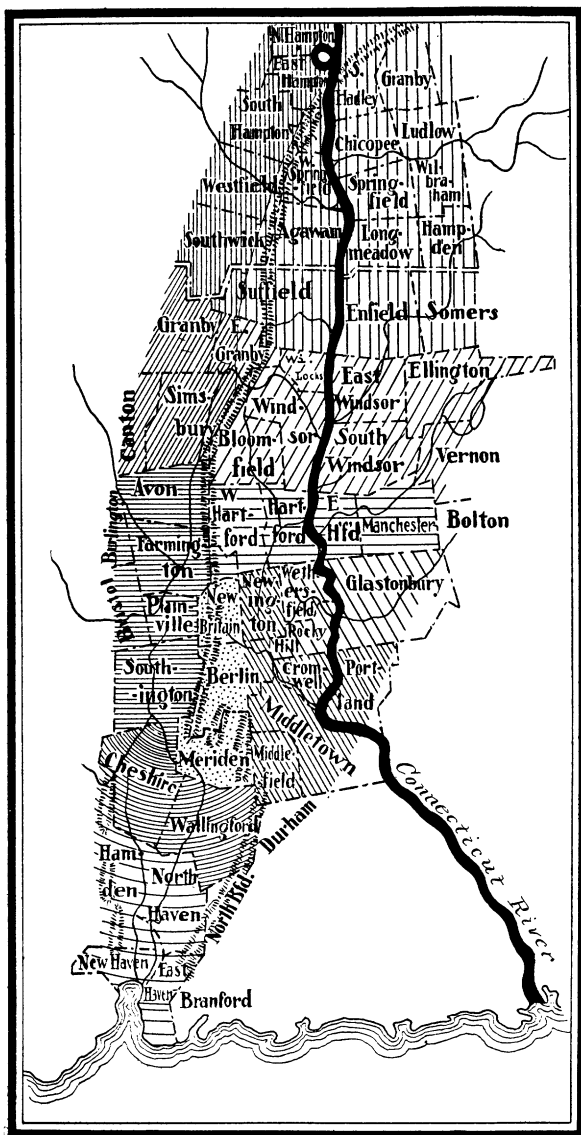


FIG. X.—HISTORICAL RELATIONSHIPS OF THE TOWNS.

and spread more evenly over the whole territory of the towns in proportion as the wilderness lost its terrors. Tier after tier of lots was laid out farther and farther away from the River, and the inhabitants gradually began to realize the true extent of the territory, which, in spite of owning it so long, they had never really occupied. At this point of the development another geographical law began to work—the law that each political unit can grow only to a certain size, which must be in harmony with geographical postulates: if it exceeds this limit it will fall apart. It is the same law which worked against the permanent existence of empires like those of Charlemagne, of Napoleon the First, or the “holy” German-Roman empire of the Middle Ages: In their times the influence of space—sheer space—yet unconquered by steam or electricity, was a force which man could not overcome, and all these huge foundations tumbled over as soon as the sceptre of a mighty tyrant no longer held them forcefully together. Even this country would never have been able to remain one union had not its making coincided with the age of steam, for which the distance between the Atlantic and Pacific ceased to be an obstacle to communication. But in the early days of which we speak here, with only most primitive methods of communication, space was the inexorable enemy of large political units. The Connecticut towns, when settled to their full extent, soon found out that they could not hold their own against it. Their territories were too large for the times, and consequently the same process of disintegration which destroyed the large empires set in here. Thus at the close of the eighteenth century another period of the foundation of new towns began, not by colonisation, however, but by *segregation*. The people of the peripheral parts of the towns found it inconvenient, and even impossible, to travel so far and so often as their duties at the town hall and meeting-house required. One after the other, therefore, the settlements in the outskirts of the towns petitioned to the Town court, at first, for “winter privileges”—viz., permission to have a pastor of their own during the part of the year when travelling caused the greatest hardship; later, for permission to segregate from the town church altogether and constitute a permanent parish by themselves; finally, for transformation of the parish into a separate town. In this way Hartford fell apart into Hartford proper, West Hartford, and East Hartford, from which, again, Manchester is an offspring; Bloomfield, Windsor Locks, Vernon, and East Windsor segregated from Windsor, and East Windsor had to give up Ellington and South Windsor in its turn; Glastonbury, Rocky Hill, and Newington were daughter towns

of Wethersfield; Middlefield, Cromwell, and Chatham, of Middletown, and Portland in its turn of Chatham; Simsbury lost Canton and Granby, and the latter, East Granby; Farmington; Avon, Bristol, Plainville, and Southington; where the three towns of Farmington, Middletown, and Wethersfield met, the settlers of this border region constituted themselves into a town of their own and called it Berlin; in the north, West Springfield, Suffield, and Enfield were taken from Springfield, and Somers from Enfield; in the south, East Haven, North Haven, and Hampden from New Haven, and Cheshire and Meriden from Wallingford (Fig. X). The immediate motives of these separations varied in the various places. Sometimes, as in the case of South Windsor, the long distances within the town are expressly referred to as the cause of the desire for a division of the town. In other cases the same cause can be indirectly traced, because the large original territory of the town included districts of very different natural opportunities, from which a diversity of occupations, and consequently of interests, among their inhabitants resulted which it was next to impossible to represent in one town government. For such reasons industrial Plainville seceded from agricultural Farmington; Windsor Locks, the manufacturing village on the Enfield Canal in the town of Windsor, from that town; in Massachusetts, Holyoke from West Springfield.* As a third group by themselves must finally be classed certain separations which were not due to any geographical influence—namely, those caused by religious dissensions among the members of a church, especially when that most prolific of all sources of New England church troubles, the location of a new meeting-house, was involved. Berlin and New Britain, where one church was successively removed to three different places according to the opinions of the party that happened to gain the upper hand in the controversy, are the classical cases of such emancipation from the mother church and town (Farmington). Granby, Canton, and East Granby present similar cases with regard to Simsbury; West Springfield took its origin as the unruly daughter of the Springfield church.

The whole territory being now divided up into a number of towns of fairly equal and manageable size, the nineteenth century found the

* In some respects Holyoke is, perhaps more than any other Valley town, the product of its terraces, which have each been utilized for the building of a canal corresponding to the respective levels of the river above and below the falls (now the Dam). But the rapid growth of this ultra-modern business town (founded in 1850) has not allowed the gradual occupation of the territory and the leisurely development of the residence districts. It is, therefore, the only terrace town in the Valley where straight streets and rectangular blocks dominate even on the highest terrace, a type perfectly out of harmony with the geographico-historical environment, due to artificial growth under a nineteenth-century boom, instead of gradual conquest of, and adaptation to, natural conditions (Fig. XI).

communities ready for the struggle for prominence, and soon the differences of their geographical conditions started among them a process of natural selection whose consequences have determined the present political geography of the country. In the century of steam and electricity there was, of course, no factor more potent in the determination of geographical values than the development of commerce and traffic, and a glance at the map of Connecticut will show that all towns and cities of any importance are found along the main lines of travel by rail or by water. The oldest of these

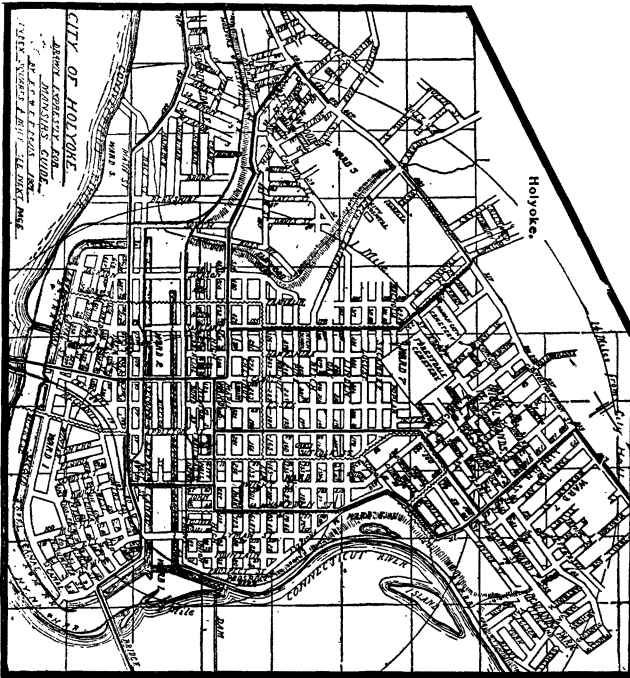


FIG. XI.—HOLYOKE, MASS. AN EXCEPTION FROM THE TRADITIONAL TYPE OF A TERRACE TOWN.

lines, whose influence began to work at the earliest date, was the waterway on the River. On it there were the five towns of Springfield, Windsor, Hartford, Wethersfield, and Middletown. From the very start Hartford enjoyed among them the invaluable advantage of a central location, which means that it was able to communicate with its neighbours in less time than any of the other four could with theirs, as illustrated in the diagram below. Supposing the five places *S*, *Wi*, *H*, *We*, *M* (Fig. XII), to be located on a line of traffic which, for the sake of convenience, may be represented as a mathe-

matically straight line with equal distances between the five points, and, counting the distance units between each two places, the peripheral location will, in the case of *S*, necessitate a trip of one unit to reach *Wi*, of two to *H*, of three to *We*, of four to *M*, and in the case of *M*, of one to *We*, of two to *H*, of three to *Wi*, of four to *S*; in all, both of the peripheral places will have to provide for a trip of ten units in order to communicate with all their neighbours. The semi-peripheral *Wi* and *We* are better off already. They can each reach two of their neighbours by means of one unit, the next by two units, the last by three—total, seven units to reach the same number of four towns. But *H*, thanks to its central loca-

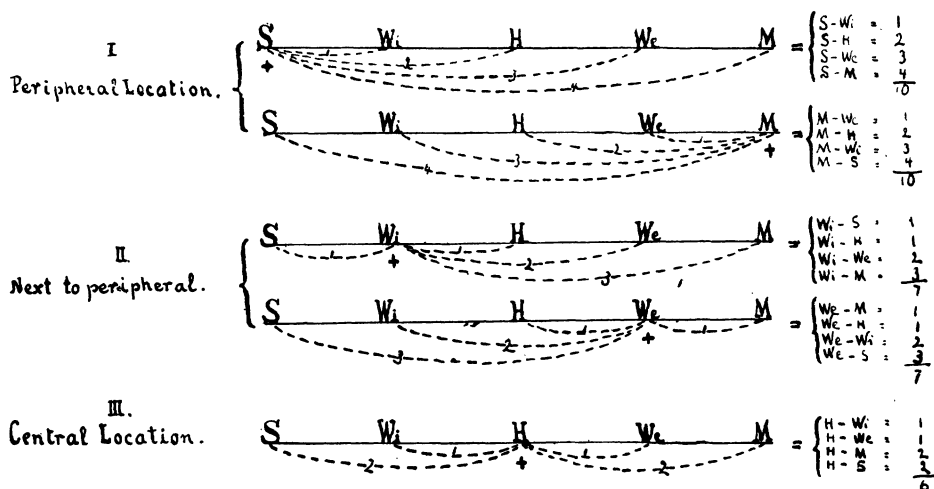


FIG. XII.—DIAGRAMS ILLUSTRATING COMMERCIAL OPPORTUNITIES OF RELATIVE LOCATION.

tion, needs one unit only to reach *Wi* and *We*, and two to reach *S* and *M*—total, six units, in comparison with the seven of *Wi* and *We*, and the ten of *S* and *M*. Both Springfield and Middletown, controlling the valley from one side only, were, therefore, from the start at disadvantage in the competition with the other towns whose opportunities upstream and downstream were nearly or entirely alike. In addition to this one-sided position with regard to the valley towns, Springfield was further handicapped by its location above the last rapids of the River, over which vessels were able to go only under exceptionally favourable circumstances, so that in the very infancy of the colony a warehouse had been built at the foot of the "Falls" to store goods for re-shipping from the large river boats to the small sloops that could be towed upstream, or in many cases for land-transportation to Springfield by way of "the" Street. This

was an obstacle which practically cut the city off from a large territory which she might otherwise have controlled; and even the construction of a canal around the Falls could not entirely overcome it. The political separation from the towns below as created through the unnatural course of the State line mentioned before gave additional weight to it, and thus Springfield interests and activities gradually confined themselves more and more to its neighbours on the north, where she soon secured the leadership which it was impossible for her to acquire among Connecticut towns.

But for Middletown there was no such compensation. To the disadvantage of its general position in regard to the Valley Towns was added the detriment of a hinterland practically without any settlers or commercial attractions. Back of the town extended, to the south and east, the uninhabited upland; to the west, the swamps of the border region between the two colonies. It was, in fact, cut off from the rest of the world save for the one way of access and egress—the River, which, as has been shown above, was only of limited commercial value below the meadow districts. Quarrying and fisheries were, therefore, the principal resources of the town for many years; and even in our times, that have given it better opportunities through the development of railroads and manufactures, the nickname of the “graveyard of Connecticut” has not quite lost its meaning.

Thus the race for prominence on the River was narrowed down to the three sister towns of Windsor, Hartford, and Wethersfield, and it was now Windsor and Wethersfield that held a peripheral location in comparison with Hartford, presenting an example of Hahn’s law hardly less illustrative than the famous case of Bremen, Hamburg, and Lübeck. At first, indeed, it seemed as if Windsor had the brightest prospects, having become, with the increasing draught of vessels, the head of navigation on the River. But, unfortunately, the process did not stop there, and when vessels went on increasing, the head of navigation again moved downstream. Hartford was in possession of a topographical advantage unequalled for miles up and down stream—namely, on its territory the first terrace extends directly down to the river, forming a bluff overhanging the water that affords a safe landing at all seasons (Fig. XIII). To be sure, a ledge of rock at Rocky Hill in the town of Wethersfield might have offered similar facilities; but this landing was away from the centre of the town, which was, in its turn, separated from the River by many acres of meadowland adjoining shallow water on a shafting reach of the same; while at Hartford the terrace back of

the bluff was the site of the business centre of the city. In this way the advantages of location and topography co-operated in securing for Hartford a commanding position in the Valley, and the foresight of her people further improved upon them by the construction of a bridge across the River, which attracted to the city the through traffic from the east and west. Having thus become the junction of the overland route and water transportation, Hartford's opportunities for controlling the surrounding country were practically unlimited; they were so great that even the efforts of a clique of

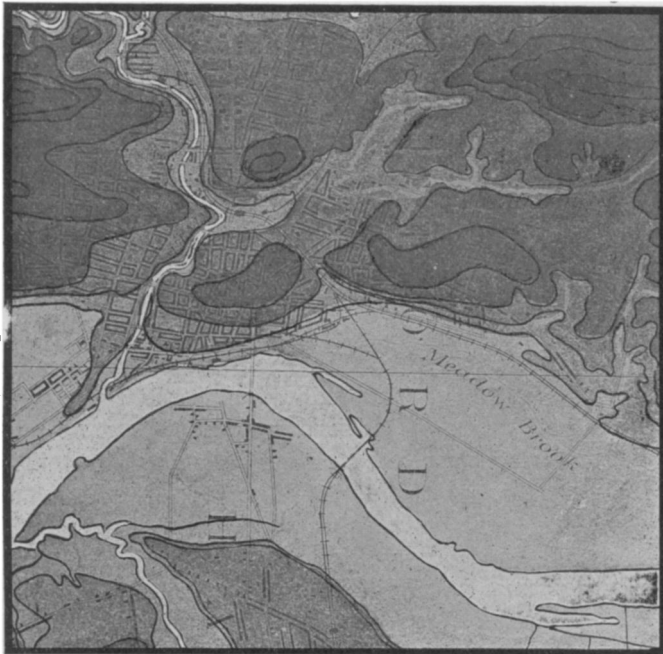


FIG. XIII.—THE BLUFF AT HARTFORD, CONN.

citizens who, for social reasons, tried to keep the city within the size of a quiet country town, could not prevent it from becoming one of the most thriving factory and commercial cities of New England.

In proportion as the advantages of easy communication in all directions were felt in this part of the valley, New Haven began to realize more and more keenly the disadvantages of her seclusion from the hinterland, and began to consider ways and means how to overcome them. The opening up of the riverless valley to the north seemed the most urgent problem, and, with the example of the

stimulating influence of the Erie Canal on the growth of New York before their eyes, the merchants of New Haven found the solution of the problem in the reconstruction of the waterway of which the irresponsibility of glacial action had deprived their town. A canal was built from New Haven to Northampton, but it did not fulfill the expectations which had caused its construction. Not only did the elements conspire against it in that loose glacial soil, so that it was a source of annoyance and expense rather than of profit for the town, but the times of the predominant importance of waterways were already waning in this part of the country, and not before the canal was succeeded by a railroad did New Haven derive any benefit worth mentioning from the new line of traffic. Nor was it an unmitigated blessing for the towns in the Farmington Valley which it connected. To be sure, it furnished them with both water-power for industries and a line of transportation for the products of the same; but following, as a canal must, the line of lowest depression along the valley, it upset all the geographical values of that part of the country. The location in the meadow now became the only one with a future; a migration of the population from the hillside to the meadows was the consequence of this readjustment of values. Industrial villages dependent on the railroad sprang up along it almost overnight, and the historic settlements on the meadow hill were left out in the cold. Thus old Farmington, whose commerce once competed with that of Hartford, was reduced to the rank of a suburban summering place of that city, while the young settlement of Plainville grew up in the meadow at its expense. Plantsville in Southington, Weatogue and Tariffville in Simsbury, Forestville in Bristol, Augerville and Centerville in Hamden, likewise outstripped the original settlements. When the railroad replaced the canal it only accelerated the process; for it killed highway travel, which had until then been the last standby of the old towns, and it created new competitors at their outskirts by sending out branch lines toward the upland, where, along the fall line, water-power, independent of any canal, caused the rise of other prospering factory villages (Collinsville, Unionville). To towns deprived of such natural advantages, which had no industries but only farming to fall back upon, the railroad proved a Grecian gift indeed, because it carried business past them rather than to them. Avon, for instance, which had been incorporated from Farmington as a separate town during the canal boom, and was, at that time, located at the crossing of the canal and the Albany turnpike with three flourishing hotels and every promise of becoming an important centre of traffic, is to-day nothing

but a sleepy farming community—a more pronounced, but less poetic, repetition of the fate of Farmington.

Similar changes have taken place along the main line, of course.

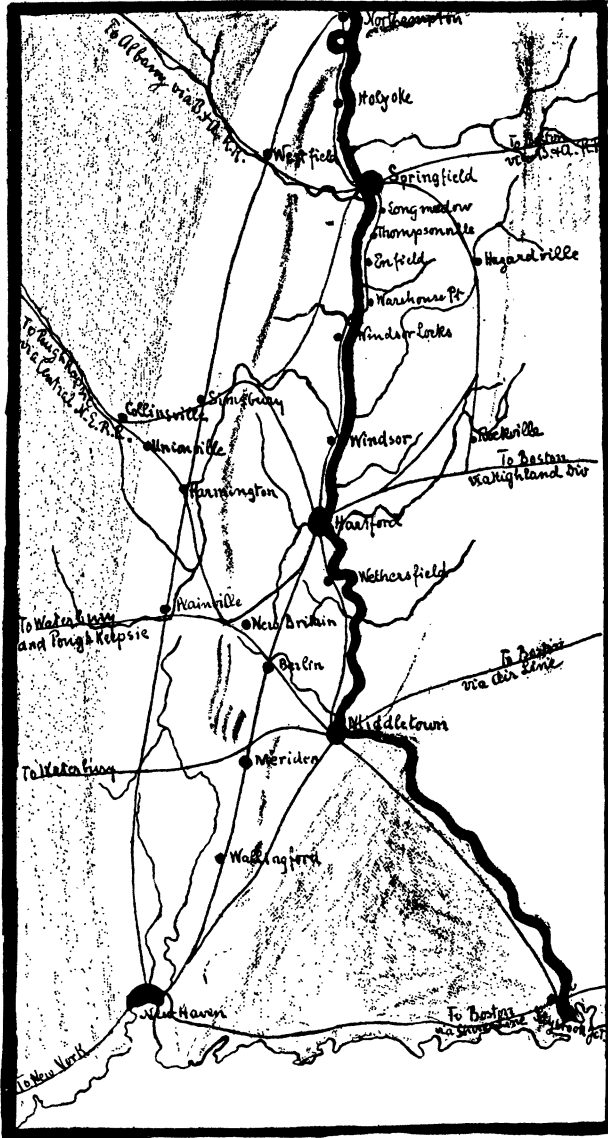


FIG. XIV.—PRINCIPAL RAILROADS OF THE CONNECTICUT VALLEY.

A glance at the map of Connecticut shows that the present importance of a town depends mostly, if not exclusively, on its position with

regard to the principal railroad (Fig. XIV). No railroad, no business; no business, no growth. The three largest cities have developed where the New Haven-Springfield trunk line connects with the lines from the Hudson to the Bay: New Haven, between Boston and New York, has the Shore and Air Lines; Hartford, between Boston and the Poughkeepsie Bridge, has the Central New England and Highland Divisions; Springfield, between Boston and Albany, has the railroad of that name. Where lines of secondary importance intersect the main line, towns and cities of lesser size, though still considerably larger than their less-favoured neighbours, have sprung into prominence: Meriden, Berlin, and New Britain at and near the junctions of the Waterbury-Middletown and Waterbury-Hartford lines with the trunk line, Middletown at that of the Waterbury, Valley Division, and Air Lines.

The consequences of the adjustment to the changed conditions have, however, been, on the whole, less revolutionary here than on the Canal Road, because the railroad does not naturally seek the line of lowest depression, but, like the highway, prefers a little higher and drier ground as long as it can proceed there without too much change of grade. Here, therefore, where no previous canal works had to be utilized in its layout, the distance between it and the original settlements was not so large as to practically deprive them of its blessings, the difficulty could be overcome by a gradual adjustment to the new conditions. The towns in the New Haven Valley simply grew downhill from their original centres to reach the railroad; and though this process caused some disturbance in real-estate values, it did not do the towns any permanent harm. Thus the traveller sees, at the Wallingford depot, a straight street of modern houses leading from the unsightly environment of his stopping-place to the hill about a mile away, where the stately old houses of the town proper welcome him. Meriden has, in a similar way, come down from its sandstone ledge and established a new business centre near the railroad in a quarter which, under the old name of Dogs' Misery, had formerly been considered entirely unfit for human beings to live in. At Hartford, the State capitol has migrated from the terrace overlooking the River to a hill overlooking the railroad—a location which was considered suburban in the old times, and the business centre likewise now extends railroadward, so to speak, instead of riverward, from the centre of the city.

The towns between Hartford and the Falls have needed the least adjustment, because the railroad, which reaches the River at Hartford, proceeds thence on the first terrace, in order to keep out of

danger from the freshets. Consequently, it runs here close by the old settlements, and its only effect has been the change in the character of the parts of the towns through which it passes. The old homes of the aristocrats of the towns on this terrace have sadly deteriorated under the influence of the inhabitants which the new mode of transportation has brought to them. On the eastern bank of the River, however, where the original town centres were built on the second terrace, the case of Farmington is repeated, the depot being so far away from the town proper that young settlements have grown up around it which have every promise of soon outstripping the mother settlement, if they have not already done so: in South Windsor, the place where the old warehouse stood is, under the name of Warehouse Point, fast being transformed into a lively village; in Enfield, Thompsonville is a hustling industrial centre, and in Longmeadow, which has not yet developed a railroad colony, the depot stands, as in Farmington, at such distance from human habitations that a stranger, upon arriving there, may for the first few moments believe himself mystified by the conductor.

Hand in hand with this influence of the railroad one of a different nature worked toward the reconstruction of geographical values—namely, the decline of the agricultural industries of the East in proportion as the resources of the West developed. The soil of the Valley could no longer support the increasing population; they had to fall back on other means of subsistence. In most cases, manufacturing was the only one available, and this brought into prominence a location which had never been a favoured one before—that of the fall line on the borders of the former “wilderness.” The process has already been touched upon in speaking of the after-canal-boom period in the western valley, in the cases of Collinsville and Unionville, to which later Bristol was added. It is even more pronounced on the east side. The city of Rockville, in the town of Vernon, is perhaps the most striking example. Others are the villages of Talcottville, in the same town; Somerville, in Somers; Hazardville, in Enfield; South Manchester, in Manchester; South Glastonbury, in Glastonbury. Secondary railroads provide for the transportation of their products to the two nearest commercial centres—Hartford and Springfield. The only places which have been able to hold their own without giving up their rural character are the fortunate towns on the alluvial soil of what was once the “meadow,” which are as prosperous on the culture of tobacco as the others are on the output of their mills.

The latest stage in this modernisation of the geographical aspects

of the Valley is just beginning; under the influence of the improved methods of communication and of the increasing community of interests caused by the uniformity of business in the neighbouring towns, the town boundaries as established during the process of segregation of the last century are rapidly becoming too narrow. One large community has, in the present, ever so much better chances of success than a couple of small ones; and it seems as if in the course of the coming century a process of reconsolidation of the present towns to more or less the size of the original ones, or an absorption of the lesser ones by the large centres, would be the most important geographical event. The possibility of a union of Hartford with West and East Hartford has already been repeatedly discussed—it is certainly not a purely theoretical discussion, and others will probably follow. The tendency is toward the creation of a few large centres between which the remnants of the old times, which have little or no manufacturing opportunities, will be left over for the lovers and seekers of rest from the busy centres, such as Wethersfield, Farmington, Newington, etc.

In the locations of the centres both old and new conditions will combine. The towns of the Farmington Valley will probably never occupy a leading position, because no one of them is geographically so much better endowed than her neighbours as to justify her lordship over them. Moreover, that valley is too narrow to afford space for any one of them to grow or consolidate to a considerable size, and, finally, their connections with the world markets are only of secondary importance. In the New Haven Valley, on the contrary, the advantages of New Haven are still so overwhelming that she will most likely always remain the one mistress of that region, as she has been in the past. Of the Valley Towns proper the glory of Windsor and Wethersfield is a thing of the past, and is reasonably certain to remain so; for as way stations only, not crossings, of the lines of traffic, they will always be at disadvantage with the other three. Windsor is a little better off than Wethersfield, because it is traversed at least by the trunk line, which is quite a compensation for the loss of the navigation business, and renders possible the existence of a few industries which contribute to the prosperity of the town. Wethersfield has, indeed, the water route at her disposal to this day; but this route has ceased to be what it was in the old times, as is best shown by the fact that it has been duplicated by a railroad. But this railroad has not given the town larger possibilities, touching no place at which the steamers do not call also; and for more than local purposes is almost of less value than the latter, which at least

reach New York directly, while the railroad, ceasing at the coast where there is no harbour, leads practically nowhere. In spite of its glorious past, Wethersfield is therefore becoming more and more a residential suburb and market garden for the sister city to the north.

Among the three centres which control crossings of the roads, Middletown occupies a position by herself. In spite of being a junction, she will never reap the full benefit of this location before a better development of her hinterland has transformed her peripheral location into a more central one, which is certainly not a matter of the near future. To be sure, the upland is no longer an unsettled wilderness; but in comparison with the business done in the Valley it is perfectly stagnant, and Middletown is actually located at the outskirts of the business world.

This leaves Springfield, Hartford, and New Haven as the close competitors for supremacy in the future. At present New Haven still leads; but it is the question whether this will always be so. The effects of peripheral and central location cannot fail to appear in the future development of these three, as they have among others. The advantage of being a seaport, which has been the basis of New Haven's local importance, is rapidly declining, now that the control of larger territories is involved. If we draw a circle of so many miles diameter around, say, Hartford or Springfield to designate the respective spheres of influence of these towns, and then another of the same size with New Haven as the centre, half of the latter circle will be water. In this age of world-wide commercial relations a seaport can have a more than local importance only if the water half of this circle covers a whole ocean, to which a land half of continental size corresponds, as in the case of our great Atlantic and Pacific ports. If even these ports begin to feel the competition of the large inland centres, of which the rivalry between New York and Chicago is the most striking, but by far not the only, example, what are the prospects of small ports like New Haven, on an inland sea, and with but a limited hinterland? The days of their exclusive maritime character and glory are over, and, like the rural towns, they must fall back on other resources to supplement the losses incurred by the decline of the importance of their shipping interests. New Haven has already done so, and is, indeed, to-day quite as much a manufacturing city as a seaport. But this change of conditions has altered her relative position to the other towns. It is no longer a case of competition between the quiet farming communities and the hustling seaport, but of manufacturing city versus manufacturing

city—that is, a race among equals, in which the best equipped will win, and New Haven's coastal location, once the foundation of its greatness, may very likely become its stumbling-block now.

Springfield and Hartford have the same overland connections as New Haven, and each of them is located, not at the periphery, but right in the heart of one of the most prosperous regions of New England, whose business it attracts and controls by innumerable secondary lines of traffic, steam and electric, which, like the arms of a huge octopus, bring to the centre anything which comes within its reach. In addition to these advantages, which both cities on the River have in common, Hartford has the unique advantage of a location at the now permanent head of navigation, at the transfer point of all merchandise from the water route to land transportation. Under such circumstances, the present outlook is strongly in favour of a final supremacy of this city. Already she has secured the distinction of being the only capital of the State, to the detriment of New Haven. It will be interesting to watch whether further development will justify these expectations, or whether new and unexpected conditions will turn up and once more transform all the geographical values, as has so often been the case in the past.

THE UNCHARTED SIERRA OF SAN PEDRO MÁRTIR.

BY

ARTHUR WALBRIDGE NORTH.

Geographically, there are four subdivisions of Baja California: the Cape Region, embracing the Cape San Lucas territory, and extending northward slightly above the latitude of La Paz, say $24^{\circ} 20'$ north; Central Baja California, extending northward from latitude $24^{\circ} 20'$ north to the 28th parallel; the "Waist," that narrow, rugged region from the 28th to the 30th parallel of north latitude, and *La Frontera*, including the territory from the old Mission sites of Rosario and San Fernando, along the line of the 30th parallel, thence northward to the American boundary above the 32d parallel.

Of *La Frontera* (The Frontier) the most prominent physical feature is the lofty plateau region of San Pedro Mártir, where the mighty backbone of the Baja California Cordillera attains to its greatest height. Doubtless some of the admirals of the brilliant Conquistador, Cortés, in their voyages up the Gulf of California in